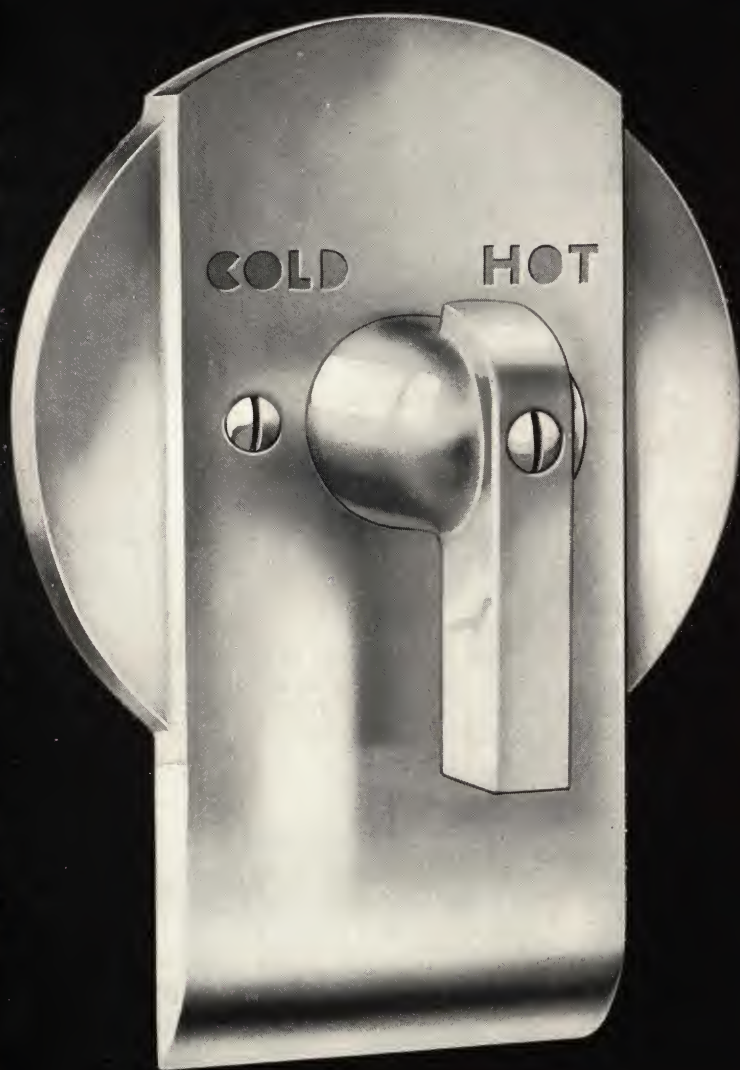


# ***THERMO-MIX***



Patented

**NO SCALD—NO CHILL**

**A POSITIVE THERMOSTATICALLY  
CONTROLLED MIXING VALVE  
FOR SHOWERS, BATHS AND  
WHEREVER ACCURATE WATER  
TEMPERATURE CONTROL IS  
REQUIRED.**

**THERMO-MIX, INC., 129 GRAND AVE., BROOKLYN, N. Y.**



## THERMOSTATIC MIXING VALVES

ASSURE POSITIVE PROTECTION AGAINST SCALD AND CHILL

- In any water system, there are always uncontrollable changes of pressure and temperature which will affect the user's comfort, and sometimes cause severe and dangerous scalding. In the industrial field, it is necessary that water used for processing some materials be kept at an absolutely even temperature, as any change would be detrimental to the material being processed. This also applies to photographic work. Either for personal or for industrial use, the desirability of thermostatically controlled mixing valves to deliver water at a predetermined temperature is readily understood and appreciated.

### A Modern Necessity

- There are many applications for the use of thermostatically controlled mixing valves. It is most essential in homes, schools, hotels, clubs, hospitals, institutions, public buildings, beauty parlors, steamships, laundries, factories, etc., that all danger of scalding water be removed. The water temperature must be entirely under the control of the individual user, or an attendant, when group control is used.

### Mechanism Must Be Positive, Accurate, Non-Corrosive, Simple and Rugged

- To be really dependable, the mechanism of a thermostatic mixing valve must be not only positive in its

action, accurate and simple in its operation, and so arranged that water has the least corrosive effect upon it, but, above all, it must be rugged in its construction. With a valve which combines all these requisites, there is no uncertainty about the temperature of the mixed water.

### Thermo-Mix Valves Have Proved Dependable

- Possessing all of the above desirable features, Thermo-Mix has qualified in the greatest test—that of use under the most adverse operating conditions. The non-corrosive, rugged features of Thermo-Mix, developed during many years of experience in the manufacture of thermostatically controlled mixing valves, have demonstrated their superior quality under every test of hard usage.

### All Parts Easily Accessible From the Front

- A distinguishing feature of Thermo-Mix Valves is the fact that all of the operating parts are readily accessible and removable from the front of the valve. It is not necessary to disturb any pipe connections to the valve; when the strainers need cleaning, the valve need not be disassembled, because the strainers are also removed directly from the front.



CONTROL FOR SHOWER AND TUB COMBINATION IN THE HOME



A CONTROLLED SHOWER IN THE CLUB



THERMO-MIX NO. 6 IN THE SURGEON'S LAVATORY



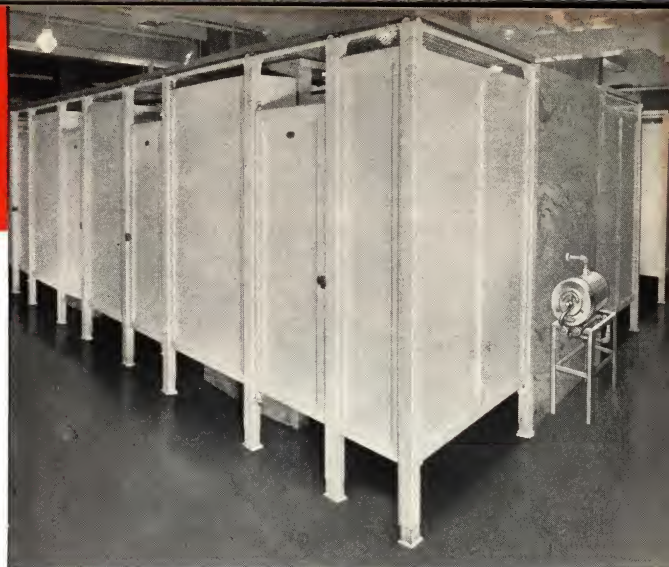
# THERMO-MIX

NO SCALD

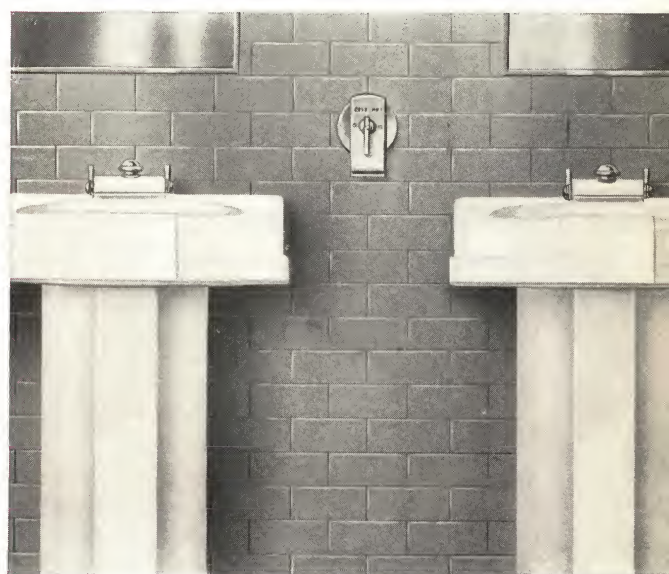
NO CHILL

## CHECK THESE IMPORTANT FEATURES OF THERMO-MIX VALVES:—

- ✓ — Assure Constant Temperature Control Under Extreme Changes in the Water Supply Conditions — This is true even when there are wide differences in cold and hot water supply pressure and changes in supply water temperature, as long as hot water is available.
- ✓ — May Be Regulated to Deliver Water at Any Desired Temperature Within a 70° Range — Water may be drawn at any temperature from cold water temperature to 130°, as desired. Higher temperatures may be secured if specified. Single unit valves, unless otherwise requested, are set so that water may not be drawn hotter than 105°.
- ✓ — Are Made of Non-corrosive Materials — All parts in contact with the water are made from Monel Metal, Copper and Bronze.
- ✓ — Will Automatically Shut Off the Water in Case of Failure of Cold or Hot Water Supply—If the cold water supply fails when the valve is set to deliver warm or hot water, the valve will shut off the hot water to prevent scalding. If the hot water fails when the valve is set to deliver cool water, it will shut off the cold water to prevent chilling.
- ✓ — Are Made So That the Thermostatic Unit Is Readily Accessible From the Front—The complete controlling unit may be removed from the casing without disturbing any plumbing connections.
- ✓ — Have Checks and Strainers Built Into the Valve Casing — Thus eliminating pipe connections, but at the same time leaving it possible to remove the strainers and check valves for cleaning, if necessary, without disturbing the operating mechanism of the mixing valve.
- ✓ — Require No Pressure Reducing or Equalizing Valves — Check valves are built into each casing so that water may not by-pass the valve. Any difference in pressure which may affect the temperature of the mixed water is compensated for by the re-proportioning of the hot and cold water by the actions of the thermostatic element.
- ✓ — Are Economical—They save water and time usually lost by manipulation of stop valves to try to control the temperature of the delivered water.
- ✓ — Will Operate Effectively Under the Harshes Treatment and Water Conditions—Thermo-Mix valves are constructed for dependable operation.



24 SHOWERS IN HIGH SCHOOL EQUIPPED WITH  
THERMO-MIX GROUP CONTROL



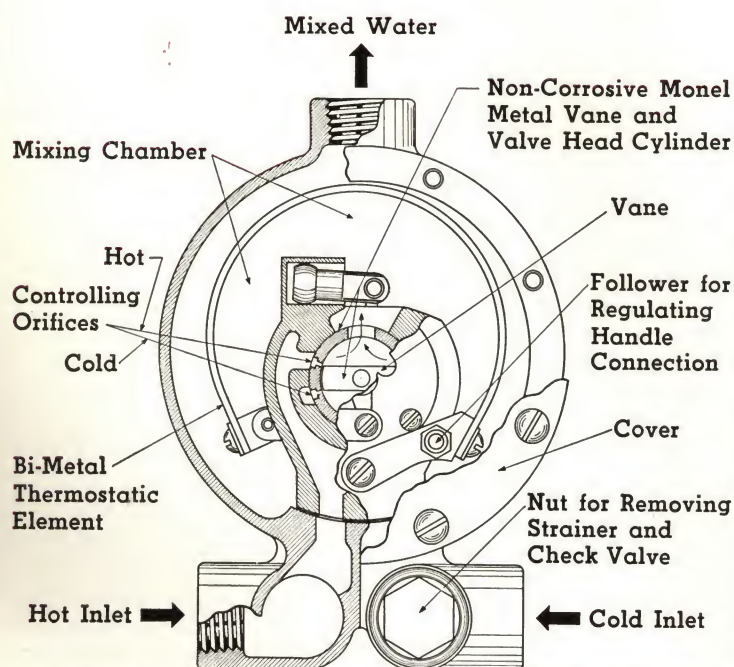
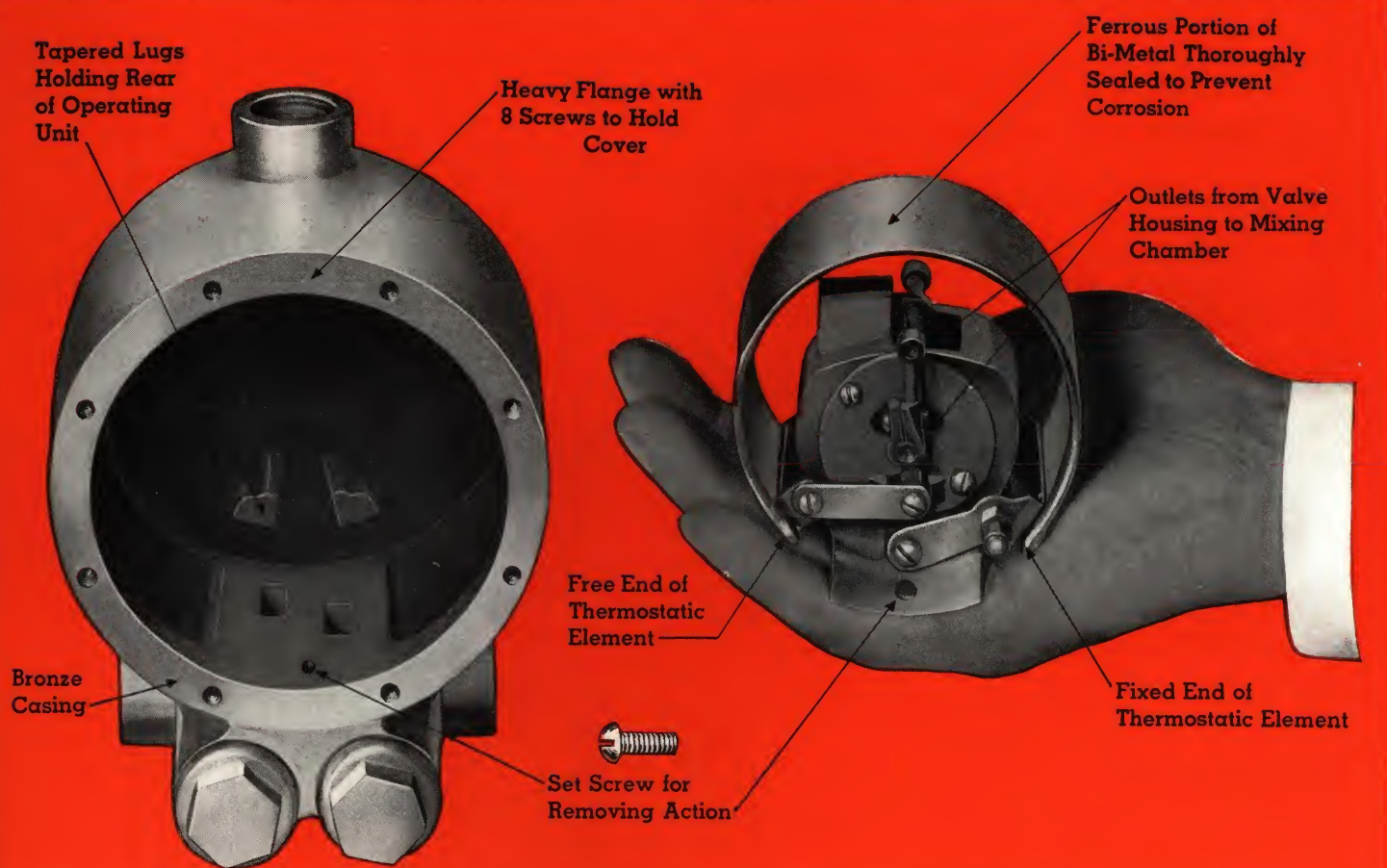
A WELL-EQUIPPED LAVATORY FOR THE MODERN  
OFFICE BUILDING



EMERGENCY BATH EQUIPPED WITH THERMO-MIX  
NO. 15 VALVE



# SHOWING THE FEW PARTS AND THE



SECTION OF NO. 6 VALVE SHOWING CONSTRUCTION

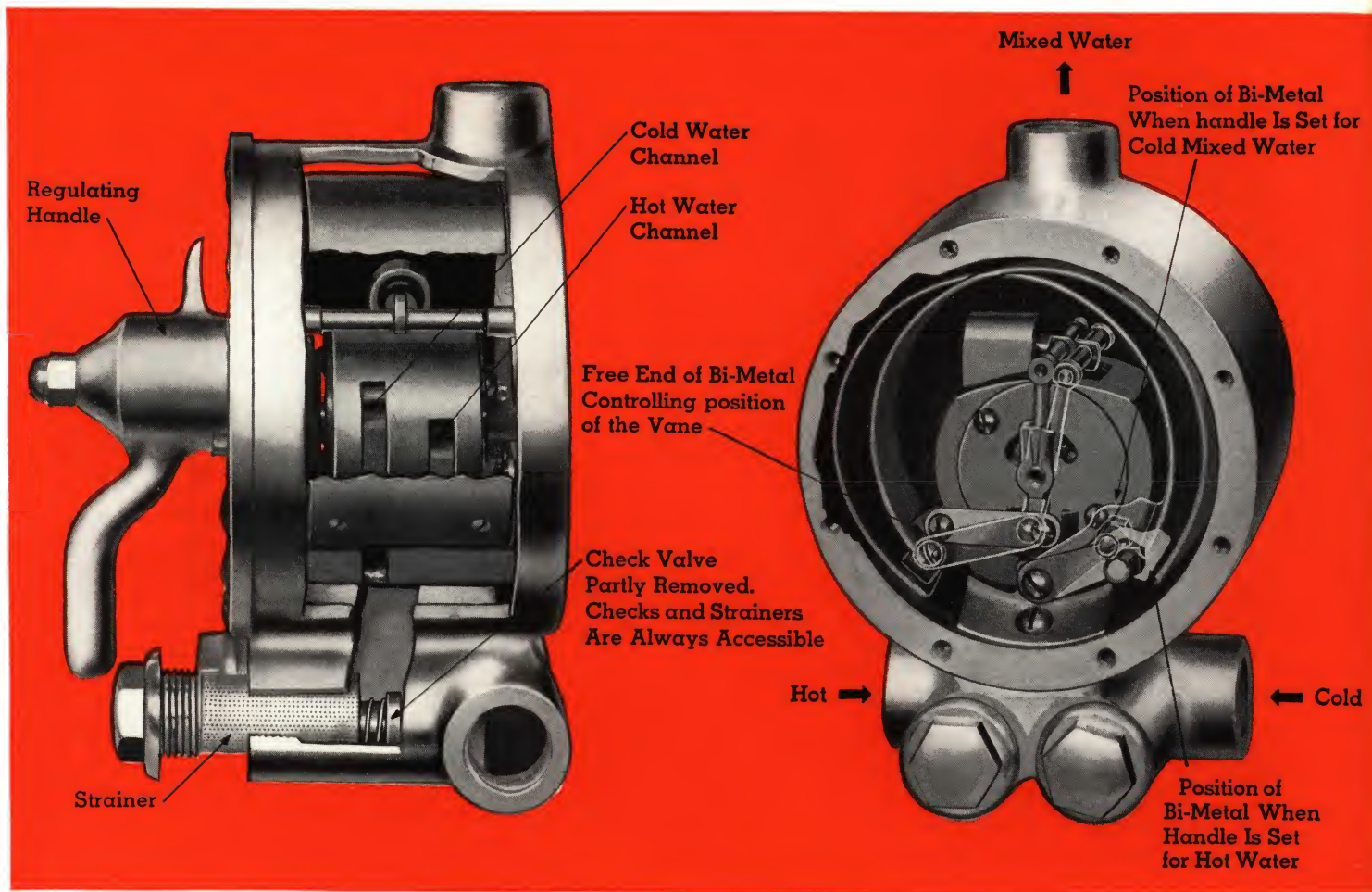
## *Simplicity of the*

### Operation:—

Setting the control handle by the user locates the fixed end of the thermostatic element in the definite position to deliver mixed water at the desired temperature. With the element in this position, both the hot and cold water enters the valve head and passes to two pairs of diametrically located orifices. The passage of water through these orifices is controlled by a vane, the position of which is governed by the movement of the free end of the thermostatic element. Even the slightest variation from the desired mixed water temperature causes the element to move, thus opening or closing the respective orifices and delivering the mixed water at the correct temperature, regardless of pressure or temperature changes in the supply water.



# THERMO-MIX RUGGED CONSTRUCTION



## Operating Principle

### Fast, Positive Action

It will be noted that the water is mixed immediately after passing through the orifices and impinges directly on the thermostatic element. All of the water passes through the mixing chamber, thus making a faster, a more positive acting mixing valve.

### Standard Pipe Connections

The pipe connections for the Thermo-Mix Valve are standard female connections in the pipe sizes which are specified for each capacity of mixing valve.

### Designed to Eliminate Corrosion

Every portion of the valve is designed to eliminate corrosion. Brass, bronze, copper, and Monel Metal are the only materials with which it is possible for the water to come in contact.

## Representative Tests:—

**TEST WITH VARIABLE PRESSURES**  
WHILE VALVE IS DELIVERING MIXED WATER AT 100°  
FROM A 185° HOT WATER SUPPLY AND A 67°  
COLD WATER SUPPLY

| Mixed Water Temp., Deg. F. | Cold Water Pressure Lbs. per Sq. In. | Pressure Percent Change from Datum | Temp. Percent Change | Hot Water Pressure Lbs. per Sq. In. |
|----------------------------|--------------------------------------|------------------------------------|----------------------|-------------------------------------|
| 100                        | 43                                   | 0 %                                | 0 %                  | 43                                  |
| 100                        | 32                                   | 25.6 %                             | 0 %                  | 43                                  |
| 101.5                      | 20                                   | 51 %                               | 1.5 %                | 43                                  |
| 102.25                     | 15                                   | 65 %                               | 2.25 %               | 43                                  |

**TEST WITH VARIABLE TEMPERATURES**  
VALVE SET TO DELIVER MIXED WATER AT 100°  
(PRESSURE 40 LBS. PER SQ. IN.)

| Hot Water Supply Temp., deg. F. | 185° | 175° | 165°  | 155°  | 145°  | 135° |
|---------------------------------|------|------|-------|-------|-------|------|
| Percent Change                  | 0%   | 5.4% | 10.8% | 16.2% | 20.8% | 27%  |
| Mixed Water Temp., deg. F.      | 100° | 100° | 99.5° | 98.5° | 98°   | 97°  |
| Percent Deviation from 100°F.   | 0%   | 0%   | .5%   | 1.5%  | 2%    | 2.5% |



# INDIVIDUALLY CONTROLLED THERMO-MIX

FOR USE IN RESIDENCES, CLUBS, HOTELS, BEAUTY PARLORS, SURGEON'S BATHS, HOSPITAL LAVATORIES, STEAMSHIPS, PHOTOGRAPHIC DARK ROOMS, ETC.

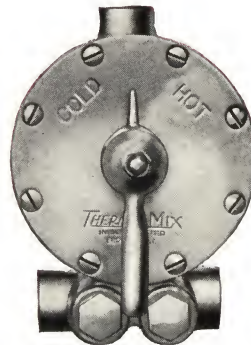
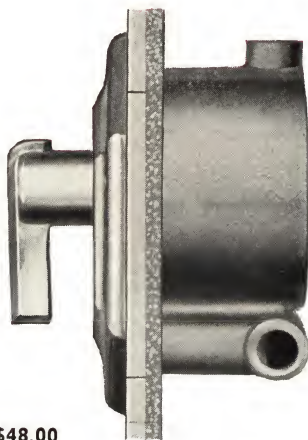
THERMO-MIX MIXING VALVE NO. 6 — CAPACITIES 6 GAL. PER MIN.



CONCEALED TYPE — PRICE \$48.00

Thermo-Mix No. 6 Mixing Valve is designed to be used to supply one outlet such as a shower, or shower and spray combination, or as a line control for the hot water supply for one large basin or two small basins in office building wash-rooms, in connection with surgeons' and nurses' lavatory wash-ups, in photographic dark rooms, in beauty parlors and barber shops.

The valve is supplied in two general styles, for concealed plumbing and for exposed plumbing. Suggestions for installation are shown below. The concealed model may be installed with key stop valves reversed, as shown by the dotted lines below, if there is to be a rear access to the general plumbing, although it is not necessary to have them reversed.



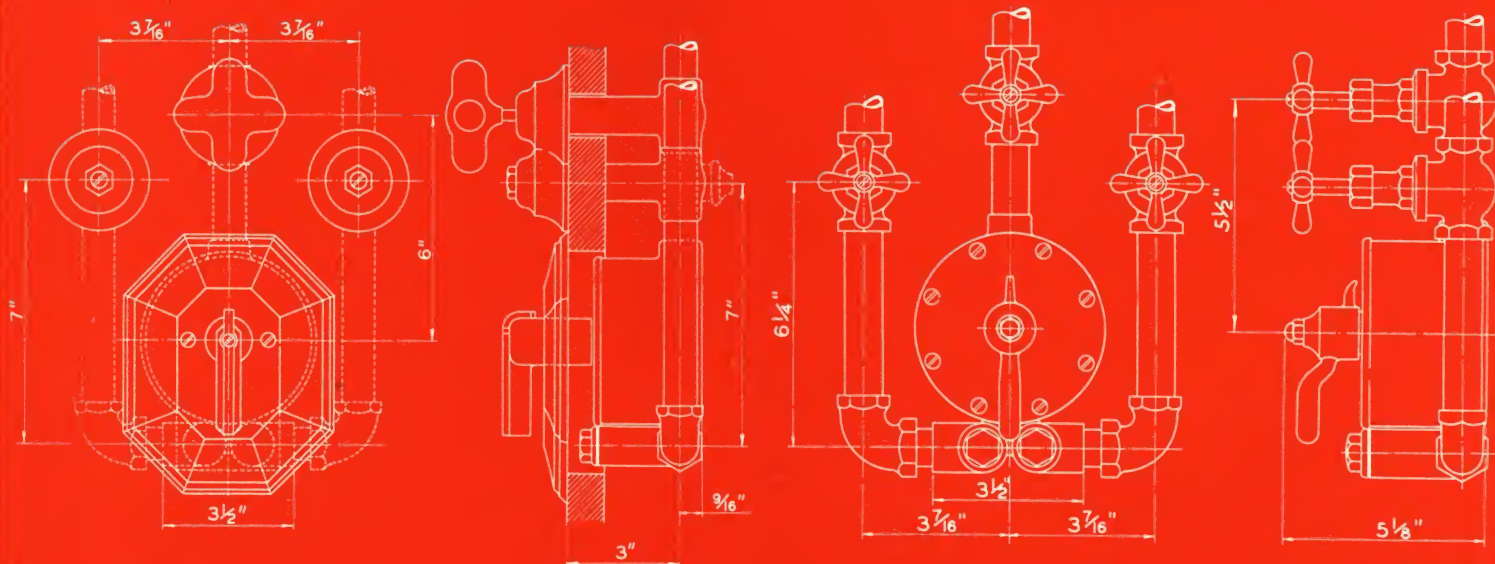
EXPOSED TYPE — PRICE \$52.00

Key stop valves should be used in order that the strainers may be cleaned when necessary without turning off the entire water system. *The company does not furnish stop valves.*

Check valves and strainers are built into all Thermo-Mix valves and no pressure equalizing valves or reducers are required. Pipe connections are standard 1/2-in. female connections.

The No. 6 valve is furnished in full chromium or nickel plate for exposed plumbing, and in rough bronze with chromium or nickel plated handle and face plate for concealed plumbing. Additional finishes will be supplied at additional cost if specified. Write for further information.

For alternate face plates, see page 7.





# COVER PLATES FOR NUMBER 6 CONCEALED VALVE



ROUND FACE PLATE



OCTAGONAL FACE PLATE



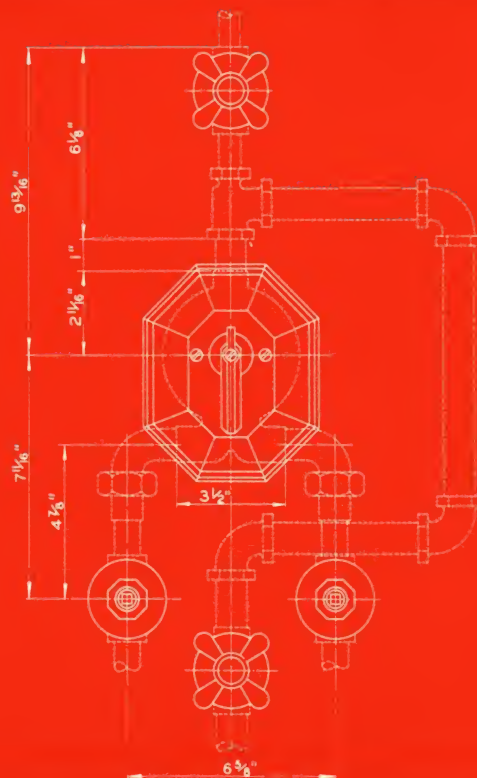
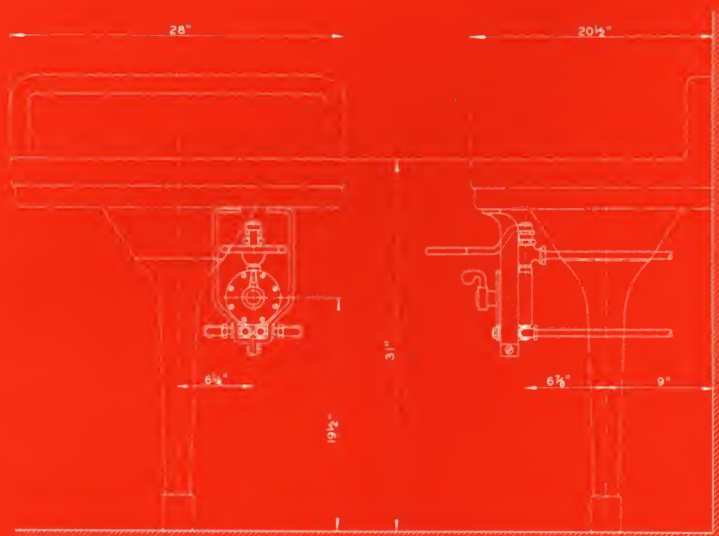
MODERN FACE PLATE

Three face plate designs are available with handles to harmonize with whatever style of plumbing fixtures is used. Any of the face plates and handles shown will be furnished, if specified, at no additional cost. If no particular face plate is specified, the octagonal plate and handle will be furnished.



## Inmate Handle

This handle is designed for use in conjunction with the round face plate in prisons and institutional installations. It is so constructed and assembled that the handle or face plate cannot be removed except with special tools. This prevents the possibility of their being removed or bent and used for any malicious or mischievous purpose.





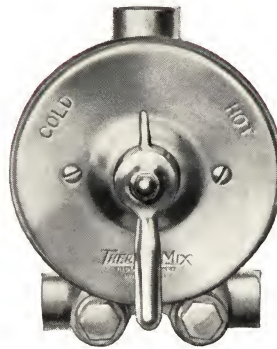
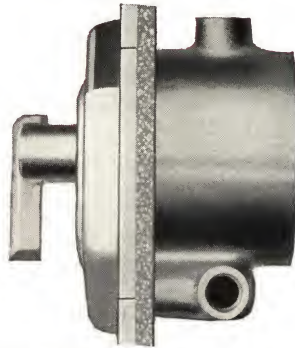
# MIXING VALVE—LARGE CAPACITY INDIVIDUAL CONTROL

DESIGNED ESPECIALLY FOR HOSPITAL BATHS; WILL ALSO  
HANDLE TWO OR THREE OUTLETS, SHOWERS OR BASINS

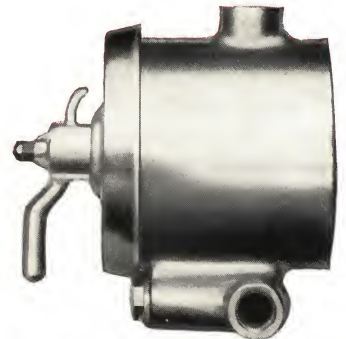
THERMO-MIX MIXING VALVE NO. 15 — CAPACITY 15 GAL. PER MIN.



CONCEALED TYPE — PRICE \$65.00



EXPOSED TYPE — PRICE \$70.00

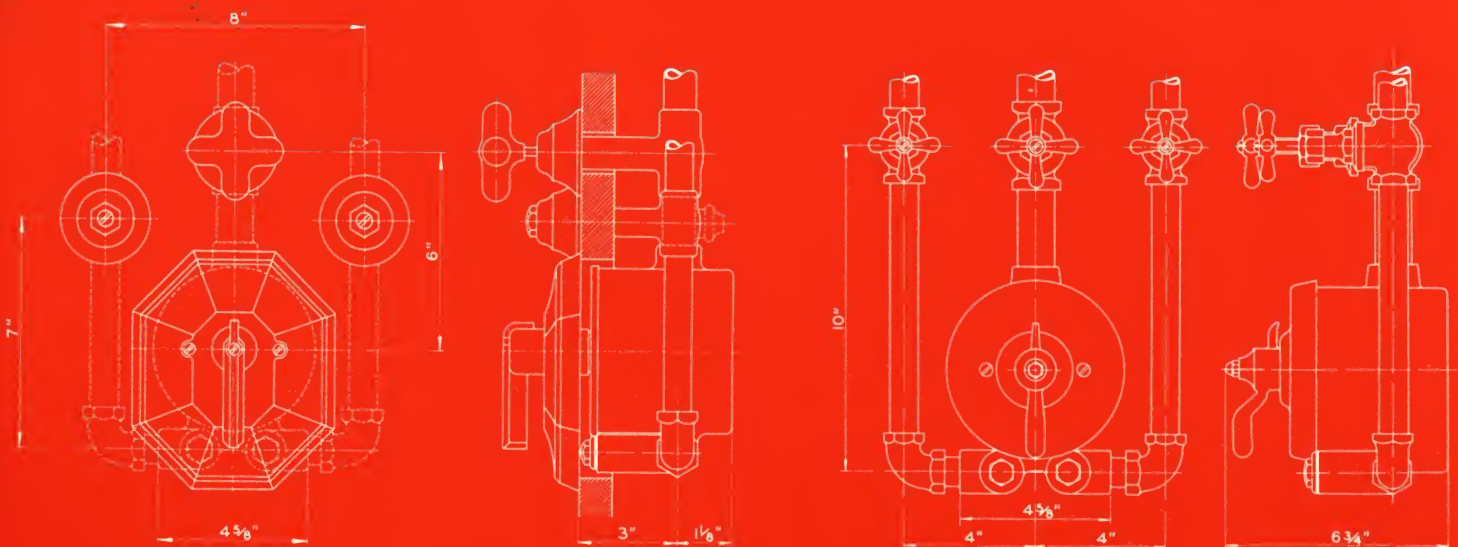


The Thermo-Mix No. 15 Valve is designed to meet the need of installations requiring more mixed water, or mixed water at a faster rate of delivery than can be delivered by the No. 6 Thermo-Mix Valve. It is an enlargement in all respects and details of the No. 6 valve.

The No. 15 Valve is furnished for either concealed or exposed plumbing. The concealed model is furnished

only with the octagonal face plate, as shown. It is furnished in the same finishes as the No. 6 Valve.

The Thermo-Mix No. 15 Valve meets the particular requirements of two or three shower heads, if used as a gang control, hospital therapeutic emergency baths, or banks of not more than four basins. Check valves and strainers are built in all Thermo-Mix valve casings, and no pressure equalizers or reducers are needed.

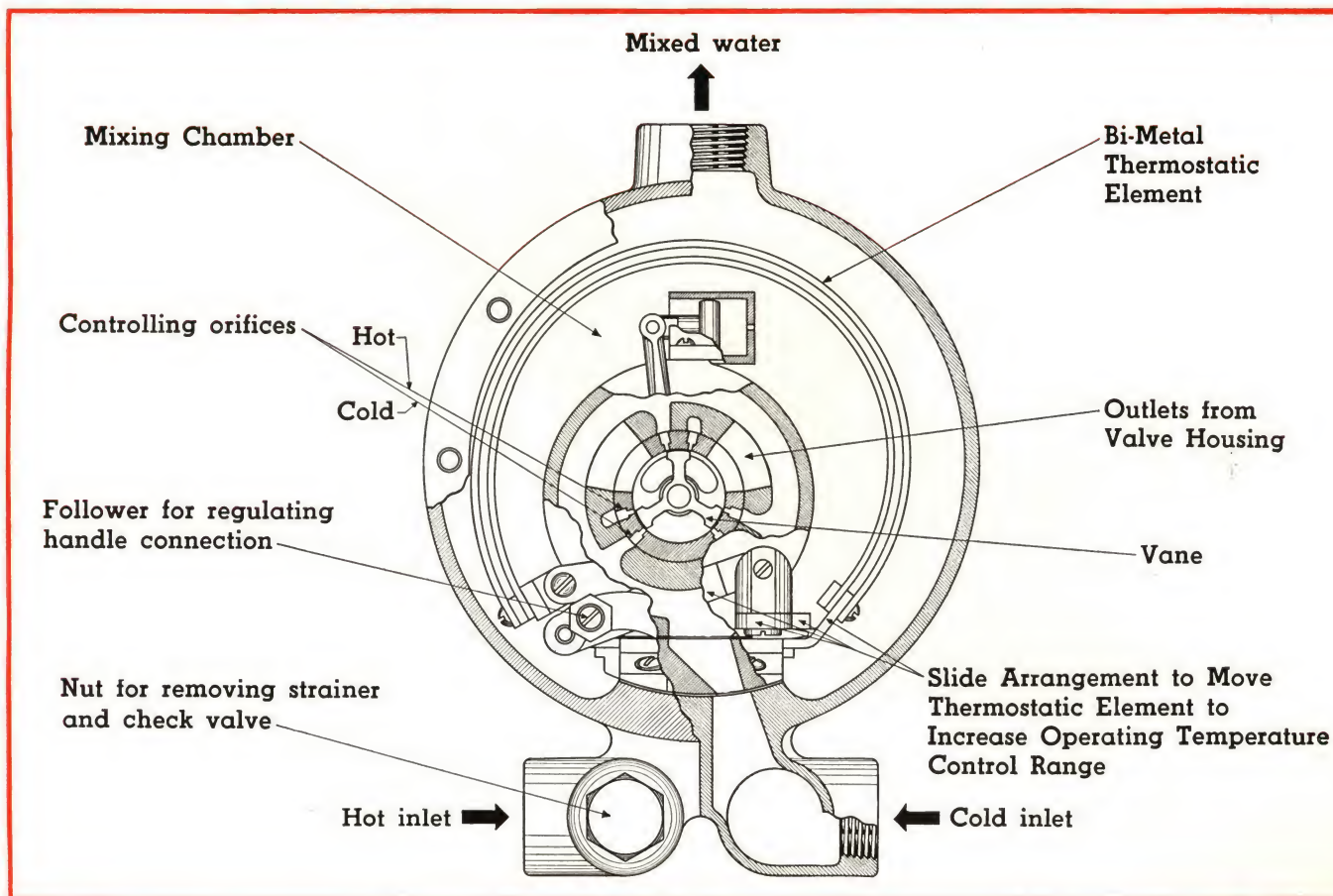




# THERMO-MIX VALVES FOR GROUP CONTROL

FOR USE IN SCHOOLS, COLLEGES, Y.M.C.A.'s, INSTITUTIONS AND ALL INSTALLATIONS WHERE LARGE QUANTITIES OF WATER ARE DESIRED

THERMO-MIX MIXING VALVES NO. 30, NO. 45, NO. 60 AND NO. 120



**GENERAL CONSTRUCTION**—The construction of the No. 30, No. 45, No. 60 and No. 120 Thermo-Mix Mixing Valves is the same in principle as the No. 6 and No. 15, except that instead of there being two pairs of diametrically located orifices, one of each pair being for hot and one for cold, there are three or four pairs symmetrically located on the interior of the valve head, and the vane has three or four blades instead of two.

Further, these larger size valves have a special patented slide arrangement governed by the control handle to re-locate the thermostatic element, in order that, when the valve is set to deliver at the desired temperature, the thermostatic element will always be in the most effective position.

Check valves and strainers are built into each casing, and no pressure equalizers or reducers are required.

These valves are furnished for exposed plumbing in full chromium or nickel finish, or rough bronze with chromium face plate and handle, or in complete rough bronze, in each case, with a round face plate

covering only the front of the body of the valve. The No. 30 Valve is also furnished with an octagonal chromium face plate and handle for concealed plumbing.

Each valve of these sizes is equipped with a graduated scale. Locks may be fitted to these sizes of mixing valves at a slightly additional cost, if specified.

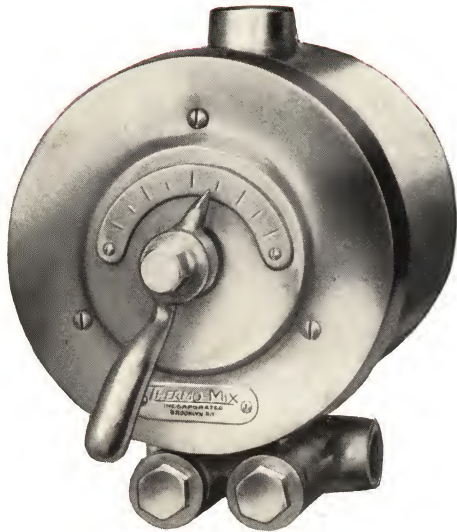
These valves are suited for use on gangs of showers where the master Thermo-Mix Valve is set to a temperature of about 100 to 110° (diagram of such an arrangement is shown on page 11), so that each individual shower will deliver water at a constant temperature suitable for a warm shower. The shower may be adjusted to suit the needs and desires of the user and at the same time positively prevent danger of scalding.

Another method is also shown on page 11. This method is best suited to public baths where the gang of showers is run as a single unit, and the temperature is entirely at the discretion of an attendant.



# THERMO-MIX VALVES FOR GROUP CONTROL

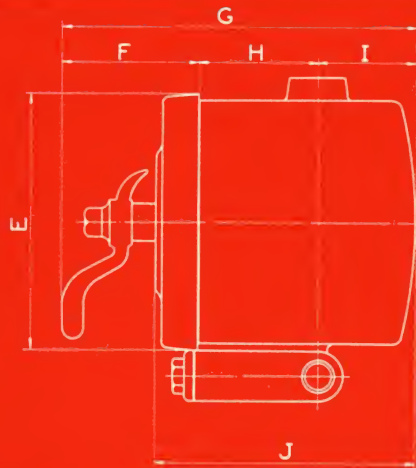
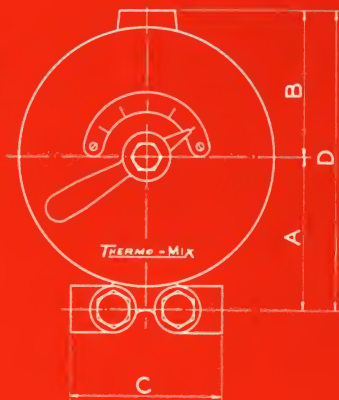
LARGER CAPACITIES WITH THE SAME ACCURACY AND DEPENDABILITY



NO. 30—CAPACITY 30 GAL. PER MIN. AT 45 LBS.  
NO. 45—CAPACITY 45 GAL. PER MIN. AT 45 LBS.



NO. 60—CAPACITY 60 GAL. PER MIN. AT 45 LBS.  
NO. 120—CAPACITY 120 GAL. PER MIN. AT 45 LBS.



ROUGHING-IN DIMENSIONS IN INCHES

| No. of Valve | Approx. Gals. per min. at 45 Lbs. | PIPE SIZES |         | A     | B     | C     | D      | E     | F     | G      | H     | I     | J      | Approx. Ship. Wt., Lbs. | Full R. B. | Chrome Handle & Face Plate | Full C. P. |
|--------------|-----------------------------------|------------|---------|-------|-------|-------|--------|-------|-------|--------|-------|-------|--------|-------------------------|------------|----------------------------|------------|
|              |                                   | In-let     | Out-let |       |       |       |        |       |       |        |       |       |        |                         |            |                            |            |
| 15           | 15                                | 1/2        | 3/4     | 3 1/8 | 3 1/4 | 4 3/8 | 6 1/8  | 5 1/8 | 2 3/8 | 6 1/8  | 2 3/8 | 1 1/8 | 5 1/8  | 17                      | \$ 63      | \$ 65                      | \$ 70      |
| 30           | 32                                | 3/4        | 1       | 4 3/4 | 4 1/2 | 4 3/4 | 9 1/4  | 7 1/8 | 4 1/4 | 10 1/8 | 3 5/8 | 3 1/8 | 8 1/4  | 30                      | 103        | 105                        | 115        |
| 45           | 45                                | 1          | 1 1/4   | 5     | 5     | 6 3/8 | 10     | 8 1/8 | 4 1/8 | 11 1/8 | 4 3/4 | 2 3/4 | 9 1/8  | 45                      | 122        | 125                        | 140        |
| 60           | 61                                | 1 1/4      | 1 1/2   | 5 3/4 | 5 1/2 | 7 3/4 | 11 1/4 | 9 1/4 | 4 1/8 | 12 1/8 | 5 3/4 | 2 7/8 | 10 1/4 | 55                      | 135        | 140                        | 160        |
| 120          | —                                 | —          | —       | —     | —     | —     | —      | —     | —     | —      | —     | —     | —      | —                       | 190        | 200                        | 225        |

Prices subject to change without notice

Company does not furnish stop valves

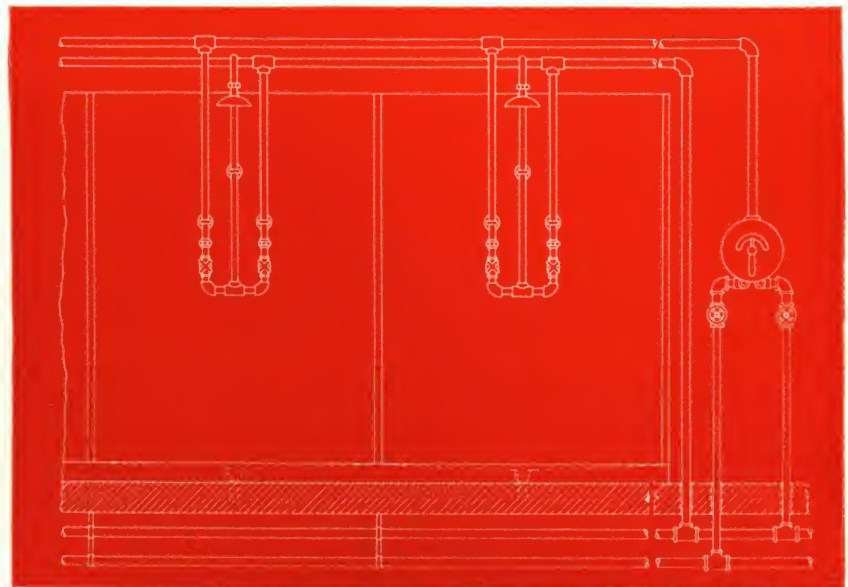


## Specification by Description

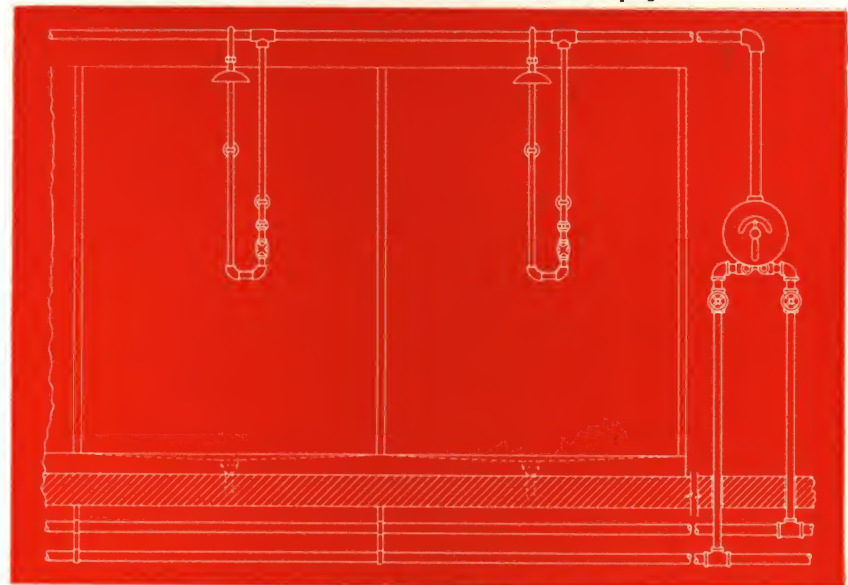
All valves shall be of cast brass body, with Monel Metal, cast bronze, and other non-corrosive metals to be used for all internal parts. The thermostatic element shall be of solid bimetal, having the ferrous side incased to prevent corrosion. The concealed valve shall be rough body with exposed parts polished and chromium plated; exposed models to be completely polished and chromium plated. Strainers and check valves shall be built into both cold and hot water inlets, and these shall be accessible without disturbing piping or working parts of the valve. Under 45 pounds pressure, the minimum capacity of the valve shall be . . . cf. page 10. Minimum temperature range shall be 70°F., with maximum temperature setting at . . . cf. page 3, this setting to be easily and simply adjusted. With a 50% variation in pressure of either the hot or cold water supply, the mixed water temperature variation shall not exceed plus or minus 3 degrees F. Upon failure of either the cold or hot water supply, the valve shall immediately cut off all water.

BELOW:

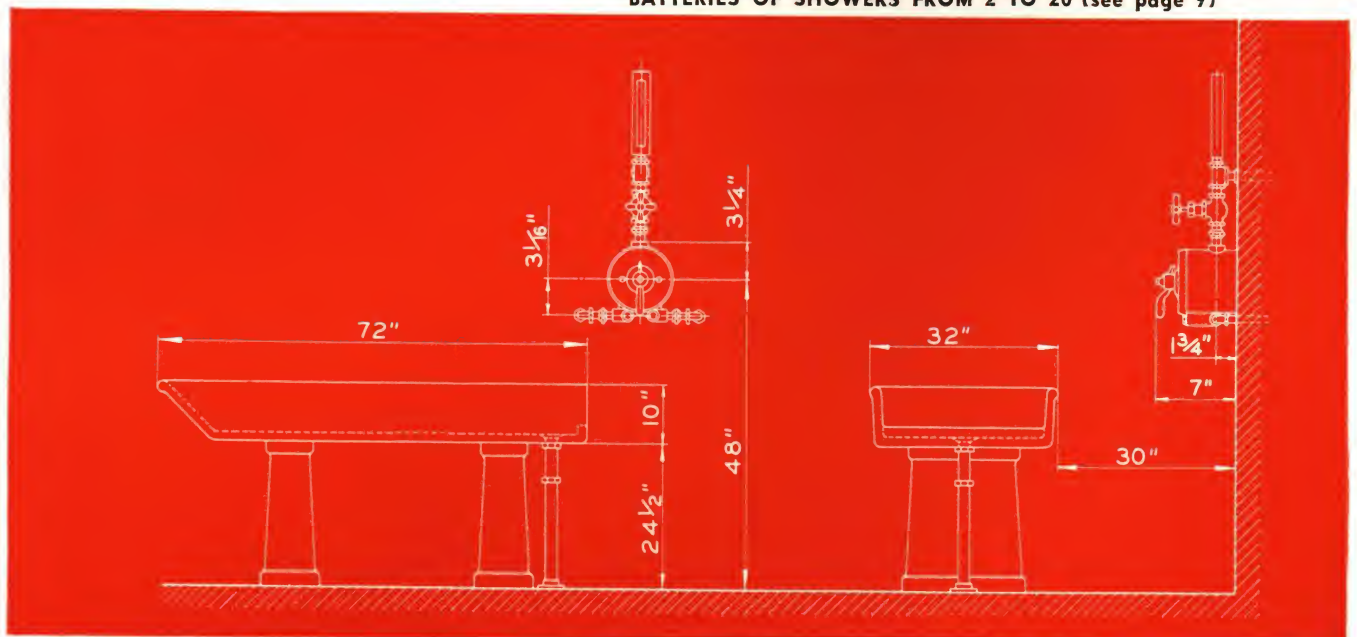
EMERGENCY BATH WITH  
THERMO-MIX VALVE NO. 15



BATTERIES OF SHOWERS FROM 2 TO 30 (see page 9)



BATTERIES OF SHOWERS FROM 2 TO 20 (see page 9)





# A FEW THERMO-MIX INSTALLATIONS

## HOSPITALS

Rochester State Hospital, Rochester, N. Y.  
Newark Valley State Hospital, Newark Valley,  
N. Y.  
Bloomingdale Hospital, White Plains, N. Y.  
Central Islip State Hospital, Central Islip, N. Y.  
Hudson River State Hospital, Poughkeepsie,  
N. Y.  
Harlem Valley State Hospital, Wingdale, N. Y.  
Middletown State Hospital, Middletown, N. Y.  
Pennhurst State School, Pennhurst, Pa.  
Farmingdale County Hospital, Farmingdale,  
N. Y.  
Newark State School, Newark, N. J.  
New Haven Hospital, New Haven, Conn.  
St. Luke's Hospital, Newburgh, N. Y.  
Allentown State Hospital, Allentown, Pa.  
United States Veterans Hospital, Roanoke, Va.

## BEAUTY PARLORS

James A. Hearn, New York, N. Y.  
G. Fox Company, Hartford, Conn.

## SCHOOLS AND COLLEGES

Middletown, N. Y., Board of Education

New York City Board of Education:

Grover Cleveland High School, Brooklyn,  
N. Y.  
Walton High School, Bronx, New York, N. Y.  
Samuel Gompers High School, Bronx, New  
York, N. Y.  
Brooklyn Technical High School, Brooklyn,  
N. Y.  
Vocational High School, Staten Island, N. Y.  
Branford High School, Branford, Conn.  
Yale University, New Haven, Conn.  
The Choate School, Wallingford, Conn.  
The Roxbury School, Cheshire, Conn.  
Howard Street School, Springfield, Mass.  
Mineola High School, Mineola, N. Y.

## MISCELLANEOUS

Southern New England Telephone Co.  
Long Island Lighting Co., Mineola, N. Y.  
Endicott Johnson, Endicott, N. Y.  
National Lead Co., Bayonne, N. J.  
New Haven C. C., New Haven, Conn.  
Gideon Putnam Hotel, Saratoga Springs, N. Y.  
Weathersfield Country Club, Weathersfield,  
Conn.  
The News Corporation, New York, N. Y.

## THERMO-MIX, INC.

MAIN OFFICE

129 GRAND AVENUE

BROOKLYN, N. Y.

## REPRESENTATIVES

F. M. IRONSIDE,  
509 Fifth Avenue, New York, N. Y.

W. T. PEASE,  
15 Thompson Street, Milford, Conn.

C. A. WAGNER,  
2402 Market Street, Philadelphia, Pa.

A. A. ANDERSON CO.,  
520 No. Michigan Avenue, Chicago, Ill.

For Other Representatives, Write to Main Office